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marks of the sculpture of the shell, and of the dilation of part of the labrum on the right side of the base of the aperture, allies this species with *Glandina leucozonias* and *dominicensis*, both of which occur in the Parish of Portland in the extreme eastern part of the island.

POLYGYRA STENOIREMA WITHOUT A LIP-NOTCH.

BY HENRY A. PILSBRY.

Mr. Bryant Walker has sent me for examination a specimen agreeing with *Polygyra stenotrema* in the main, except that the basal lip is without the usual median nick or notch. The parietal lamella is strong and high, as usual in the species. Form rather elevated. Alt. slightly over 6, diam. 8.7 mm. It was taken by Mr. Walker at Dalton, Georgia; being the only *stenotrema* collected at that place.

In the collection of Mr. Geo. H. Clapp are two specimens, formerly in the James Lewis collection, labeled "East Tennessee," which agree with Mr. Walker's Georgia shell in lacking the lip-notch, although in one a slight wide sinuation of the lip in place of it, is perceptible. They measure 8 and 8.5 mm. diam., one with high, the other moderately low spire. All of the specimens show hairs or their traces, as in *P. stenotrema*, though not very conspicuously.

The lip-notch in the *stenotrema* species corresponds of course to the space between the lip-teeth in *Triodopsis*, the thickened ledges on each side of the notch being homologous with the basal and outer teeth in such species as *P. tridentata*. These notchless shells therefore represent cases of confluence or concrescence of teeth, a somewhat rare occurrence in Helices.

The question arises, are these shells merely abnormal forms produced by some mantle injury or other abnormal condition, or do they represent a rare race of which the notchless lip is characteristic? The former alternative seems most probable, except that the shell and lip seem quite without trace of any evidence of a diseased condition of the mantle, which is usually manifested by some roughness in the deposition of lime at the lip, or irregularity in the cuticle behind it.

However, the question is not one to be decided off-hand, but by the examination of more material; and I would ask collectors to go over their specimens of *P. stenotrema* and allied species, and report

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full results to THE NAUTILUS. Locality of specimens and number examined from each locality should be given, as well as the occurrence of specimens without the notch. Any other notable variation might also be noticed; and negative results, so far as regards the matter of the notch, will be useful. The entire results can then be collated and published in THE NAUTILUS.

A CONTRIBUTION TO WEST COAST CONCHOLOGY .- Continued.

BY HENRY HEMPHILL.

As the original locality, "Santa Barbara," given for Helix kelletti, Fbs., is undoubtedly a mistake, some writers on our land shells have referred that shell to Santa Barbara island, which is equally as erroneous. Santa Barbara island is about one or one and one-half miles long and perhaps one mile wide, and quite easy of exploration. On my first visit to it, 25 years ago, I was left there alone for seven days, while the vessel went to San Pedro to be cleaned and repaired. During that time I explored every part of the island, collecting the land shells, which was the especial object of my visit. Last August I made another visit to that island for the same purpose, and gave four days more to collecting the land shells, and during these eleven days not a single specimen of Helix kelletti was found, and as dead Helix tryonii may be picked up by the thousands, and as no shell of that description was mentioned in Forbes' report of the "Herald and Pandora" surveying expedition or voyage, during which time the original kelletti was collected, we may reasonably suppose that the vessels of that expedition did not even visit Santa Barbara island.

It is quite interesting and instructive to note the various opinions that have been expressed from time to time by distinguished conchologists on this matter. In the Am. Jour. of Conch., vol. 4, pl. 4, p. 214, 1868, Dr. J. G. Cooper writes: "Kellett's specimens were probably from one of the small islands off the coast of the peninsula (Lower Cal., H. H.), though credited to "Central America," and were a dwarfed form, the species attaining its highest development on Catalina island, within this state (Cal., H. H.), not Santa Barbara island, as stated by Newcomb, where *tryonii* replaces it."

"Prof. A. Wood found specimens on the summit of a mountain twelve miles east of San Diego, and at one or two thousand feet ele-

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